Federal Utility Partnership Working Group

Tampa Electric's Experience with Renewable Energy

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Smart Source Program Manager

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Program Overview

- Smart Source is Tampa Electric's renewable energy program
- Initial offering November 2000
- Tariff based
- Energy based program - 50kWh block for $5.00

Smart Source
Renewable Energy Technologies

- 18kW Solar photovoltaic array at the Museum of Science and Industry (MOSI)
- Biomass generation at Gannon Station
- Potential renewable sources
  - Biomass gasification at Polk Station
  - Landfill gas generation

TEC's Solar Generating Station

-Earth Day 2000 Dedication Ceremony

Initial Hurdles to Implementation

- Higher cost of renewable resources
- Limited availability of renewable generation
- Environmental permitting for co-firing
- Fuel quality
- Research to identify target markets
- Educating customers on renewable issues

Current Hurdles to Sustain and Advance the Program

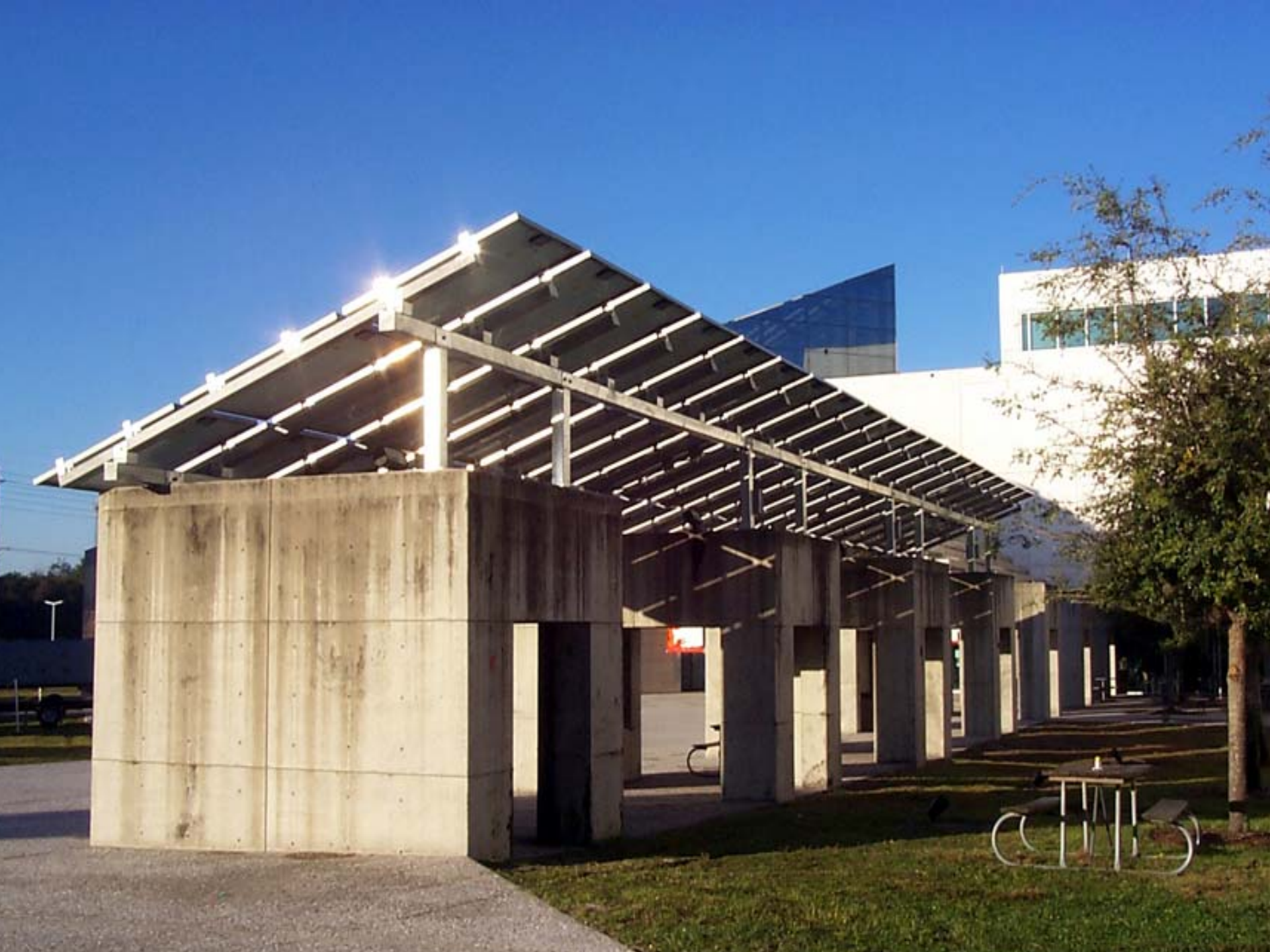
- Finding low cost qualified renewable generation
- Unit reliability
- Reducing customer acquisition cost
- Attracting new subscribers
- Retaining current subscribers

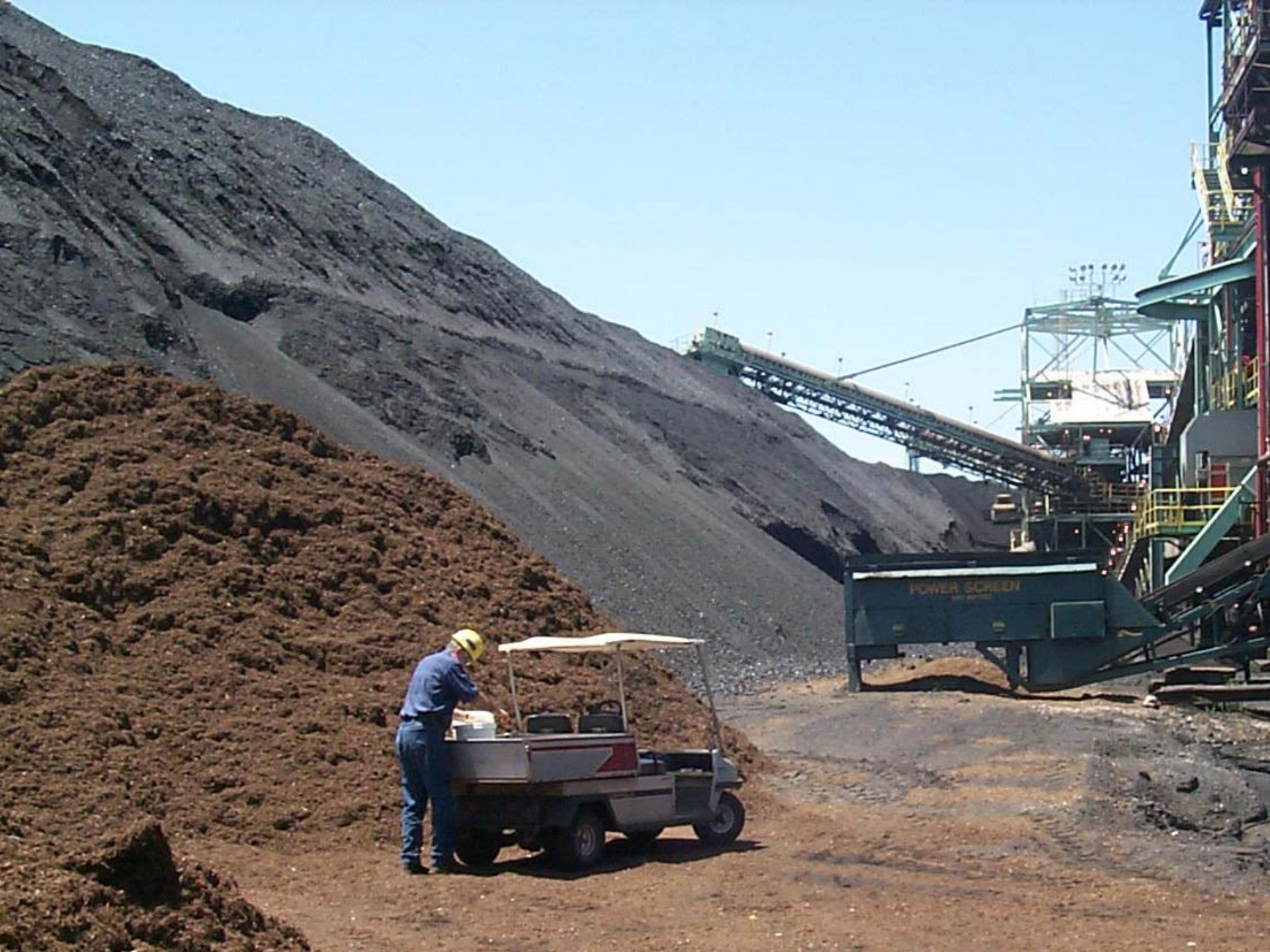
Current Hurdles to Sustain and Advance the Program (continued)

- Increasing program block size (value)
- Grow revenues to cover cost
- Develop additional renewable resources
- Educating customers
- Perception of no tangible benefits
- Lack of support for environmental attributes

3 to 5 Year Objectives

- Increase program participation to 1% - 2% of customer base
- Install additional PV
- Develop or acquire “greener” renewable generation
- Create an increasingly significant environmental impact




POWER SCREEN

POLK BIOMASS TESTING

“It’s not easy being green”

K.T. Frog

Concerns

- Renewable legislation at the national front
- State vs. national RPS conflicts
- RPS placing upward pressure on rates
- RPS measurement criteria - kW vs. kWh
- Program sustainability with RPS
- Commercial availability of new technologies
- Biomass limitations and impacts